Ahire Abhay Madhukar

UG (IV Year I Semester)
B.Tech. (Chemical Engineering)
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Registration No: 20112008/2024

Indian Institute of
Technology
Roorkee

VERIFIED

Area of Interest

Data Structure, Algorithms, Problem-Solving, competitive programming, SQL

Education

Year	Degree/Examination	Institution/Board	CGPA/ Percentage
2023	B.Tech. 3rd Year	Indian Institute of Technology, Roorkee	7.885
2020	Intermediate (Class XII)	K.R.T. ARTS, B.H. COMMERCE & A.M. SCIENCE (K.T.H.M.) COLLEGE, NASHIK	89.38 %
2018	Matriculate (Class X)	J.S. Rungta High School, Nashik	90.80 %

Internships

Deep Learning based Model building for plant disease detection | IIT Roorkee   May 2023 - July 2023

- Developed a high-accuracy Deep Learning model utilizing EfficientNetB0 model for plant disease detection, attaining an impressive 99.90% accuracy
- Trained the model with an extensive dataset comprising over 70,000 diverse images sourced from the Plant Village and PlantDoc datasets to enhance overall performance
- Successfully tested the model on an NVIDIA Jetson Nano IoT device, enabling real-time crop health analysis

Projects

India's Renewable Energy Potential & Power Demand Analysis | IIT Roorkee   December 2022 - February 2023

- Analyzed India's power demand using representative days
- Collected solar and wind data from NASA's Power project
- Conducted statistical analysis on the data
- Utilized Agglomerative clustering and the Elbow method to identify optimal clusters and representative days

Development of information Website of ChESS | IIT Roorkee   March 2021 - March 2022

- Contributed to the development of the information website of ChESS
- Developed the website using React with material-ui as UI framework
- Developed the team members' details page and container for storing the information for team members
- effectively worked with a team of more than five members in area of communication and task allotment

Carbon footprint finder | IIT Roorkee   January 2023 - April 2024

- Conducted research on individual carbon emissions, analyzing daily activities such as household, travel, and food
- Calculated carbon footprint, providing a detailed breakdown of emissions associated with various lifestyle components
- Developed a User-Friendly interactive carbon calculator for easy computation of individual carbon footprints
- Offered personalized emission reduction suggestions based on the calculated footprint

Awards / Scholarships / Academic Achievements

- Performance in top 1% in Class XII Board Examination

Positions of Responsibility & Extra Curriculars

Executive | ChESS   March 2021 - March 2022

- ChESS, The Chemical Engineering Student's Society, is a student's organization.It acts as an interface between the students and the experienced faculty, thereby removing the gap between them.
- Work effectively with a team of 12 heads and co-heads and 30 executives of various verticals
- Suggested the plan for completion of the semester without ETE and evaluation of semester grades.
- Organized and hosted panel discussions on various research topics for the students engaged in chemical engineering.

Competitive Programming | Online Judges   May 2022 - Present

- An active member of various online judges and solved 500+ problems with sheer consistency.
- 3 - start coder at Code Chef with the highest rating of 1642 and maintaining contest rating of 1613 (Handle: abhay_0210)
- Mantaning a rating of 1,676 on Leetcode(Handle: abhayahire2002)
- Global rank 81 in CodeChef June Long One 2022
- Earn 5 start badge in problem-solving at HackerRank (Handle : abhayahire2002)
- Maintaining the institute rank of 35 in GeekForGeeks Practice(Handle : abhayahire2002)

References

Ishan Bajaj
Assistant Professor
IIT Roorkee
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